

CAST ALLOY INSTRUMENT PANEL BEAM**Abstract of the Disclosure**

A beam cast of an Al-Mg alloy is used for mounting various automotive vehicle components adjacent to a cowl/plenum structure at the forward end of a passenger compartment of an automotive vehicle. The beam includes a laterally extending main beam portion attached at the ends thereof to the driver side and passenger side front pillars. A plurality of spaced strap portions, cast unitary with the laterally extending main beam portion, extend forward from the main beam portion for attachment to the cowl/plenum structure. A pair of vertical strut portions, also cast unitary with the main beam portion, have a space therebetween for accommodating HVAC components. The pair of substantially vertical strut portions have lower ends adapted to attach to vertical steel struts that anchor the lower ends of the substantially vertical strut portions to a floor brace. The substantially vertical strut portions cooperate with the strap portions to dampen frequency response in the main beam portion of the cast Al-Mg alloy beam arrangement.